

[illegible]

the federated layer



CS3MESH4EOSC has received funding from the European Union's Horizon 2020 Research and Innovation programme under **Grant Agreement No. 863353**.

SCIENCE MESH CORE APPLICATIONS

OVERVIEW



**Data Science
Environments**



**Open Data
Systems**



**Collaborative
Documents**



**On-demand
data transfers**

More at: <https://cs3mesh4eosc.eu/science-mesh/data-services>

SCIENCE MESH CORE APPLICATIONS EXPLAINED

Data Science Environments

Data Science applications accessible via the web interface at the remote sites to enable researchers to work on algorithms and data processing programs interactively.

Open Data Systems

Enable users (scientists) to add metadata, package and publish datasets with persistent identifiers directly on the Science Mesh sites or to external data repositories.

Collaborative Documents

Edit & share documents in real-time with multiple contents and with data shared in different folders, enabling the user to track their contents.

On-demand data transfers

Fast transfer of data from remote to local sites, across countries, specifically supporting use-cases not able to extend processing to remote sites.

More at: <https://cs3mesh4eosc.eu/science-mesh/data-services>

APPLICATIONS AND TOOLS INTEGRATED WITHIN SCIENCEMESH

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FEDERATION SOLUTIONS WITHIN SCIENCE MESH

AAI Federation



Interfederation sign-on service, led by GÉANT. 55 federations world wide, allowing users to cross-authenticate across organizations and countries. ScienceMesh nodes are in EduGain.

IOP implementation



The Reva aims to make cloud storage & application providers inter-operable through a common platform, by implementing CS3 APIs, providing a vendor-neutral basis for interoperability.

IOP API definition



The CS3 APIs aim at connecting storage and application providers together. It will be the “glue” which binds together nodes and applications in ScienceMesh.

Cross-service file sharing API



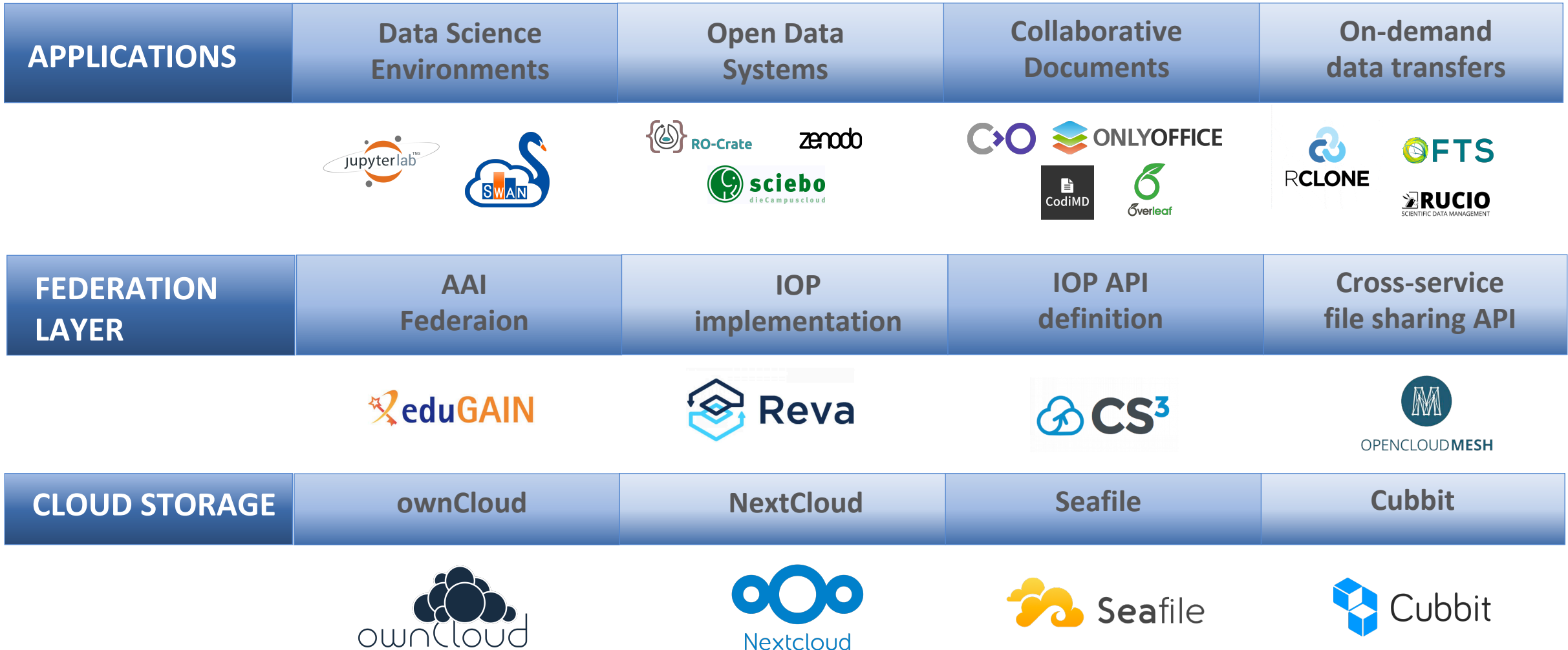
OPENCLOUD MESH

Vendor-neutral open protocol offering a common file access across an organization regardless of the location of the data and choice of clouds solution in the back-end.

More at: <https://cs3mesh4eosc.eu/science-mesh/data-services>

FULL TECHNOLOGY STACK

WITHIN SCIENCEMESH



SCIENCE MESH CORE APPLICATIONS

USE-CASES PRESENTED TODAY (1)

Collaborative Data Science
High Energy Physics
(presentation by Marcin)



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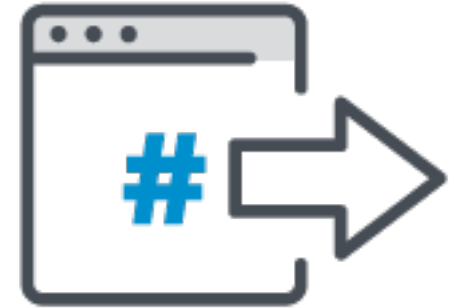
**On-demand
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SCIENCE MESH CORE APPLICATIONS

USE-CASES PRESENTED TODAY (2)

Data Openness

Endangered Languages: PARADISEC
(presentation by Guido)



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